



**SHIMANO NEXUS 7-SPEED HUB**

**SG-7C26**

**SERVICE MANUAL**

**vol.1**



**SHIMANO**

## Disassembly of the Inter-7 hub

### SG-7C26

**Note:**

Unit parts should never be disassembled. If they are, problems may result.

When replacing parts, replace the whole internal assembly or unit part.



### Tools

**Note:**

Before carrying out disassembly, have ready the hub spanners (TL-7S20) and internal hub grease.



Screwdriver (Left)

TL-7S20 (Right)

Hub spanners  
Part No. 3-130 9890  
17mm x 22mm (2 pcs.)

1. Hold the two bevelled surfaces of the hub axle on the brake arm side in a vice and remove the dust cap with a screwdriver.



Vice

**Note:**

Do not damage the threads of the hub axle.

2. Turn the brake arm unit upside down and hold the two bevelled surfaces of the hub axle on the sprocket side in a vice.



**Note:**

Do not damage the threads of the hub axle.

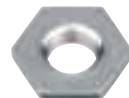


Remove the left hand lock nut from the hub axle, and then remove the stop nut.

TL-7S20

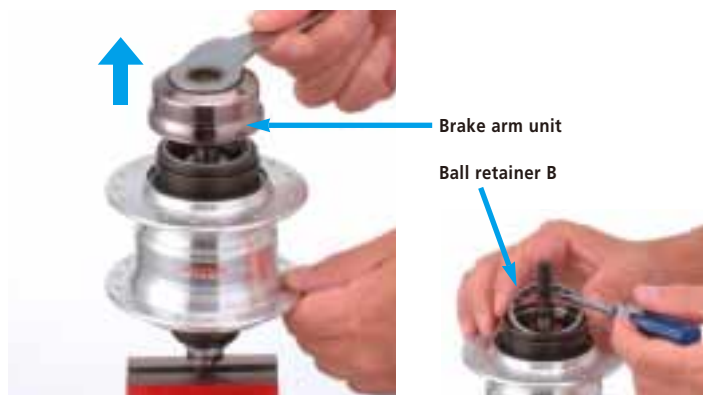


Lock nut



Stop nut

- 
- 3.** Remove the brake arm unit and ball retainer B from the hub axle.



- 
- 4.** Remove the hub shell.



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**Now it can be replaced with the new internal assembly.**

Disassembly and assembly can be carried out quickly.

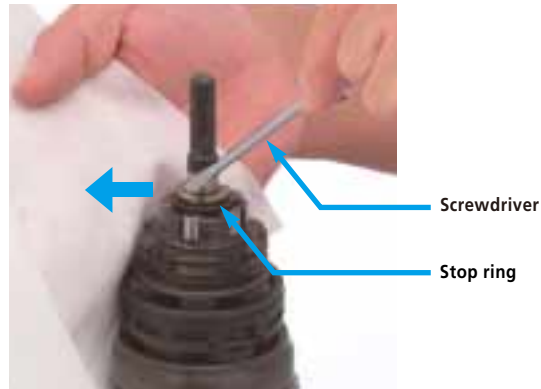
Part No. 33Z 9801



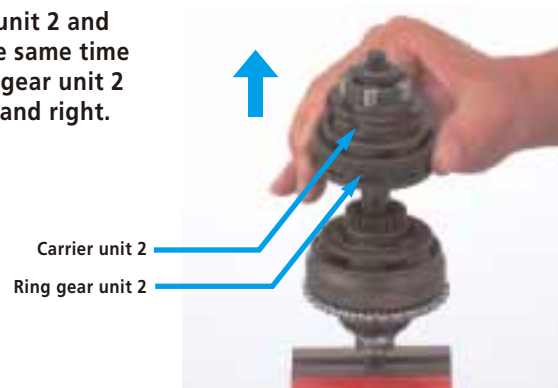
- 
- 5.** Remove the brake shoe unit.



- 
- 6. Remove the stop ring with a screwdriver.**  
At this time, the stop ring come off with great force.  
Be careful of the safety using cloth and so on.



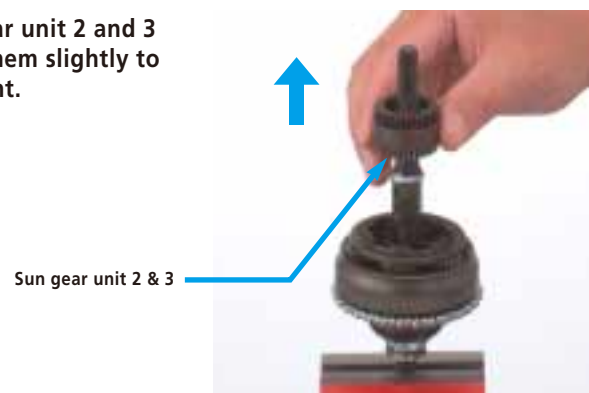
- 
- 7. Remove ring gear unit 2 and carrier unit 2 at the same time while turning ring gear unit 2 slightly to the left and right.**



After removing them at the same time, remove carrier unit 2 from ring gear unit 2.



- 
- 8. Remove sun gear unit 2 and 3 while turning them slightly to the left and right.**

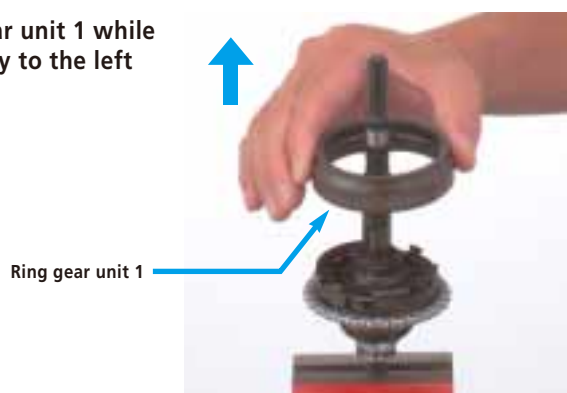


**Note:**  
If undue force is applied during removal, the pawls inside will become damaged, which will cause operation problems.

- 
- 9. Remove carrier unit 1.**



- 
- 10.** Remove ring gear unit 1 while turning it slightly to the left and right.



- 
- 11.** Remove ball retainer H while pressing in pawl C on the driver and axle unit with a screwdriver.

Be careful not to bend ball retainer H.



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**This completes the disassembly of the Inter-7 hub.**



## Assembly of the Inter-7 hub

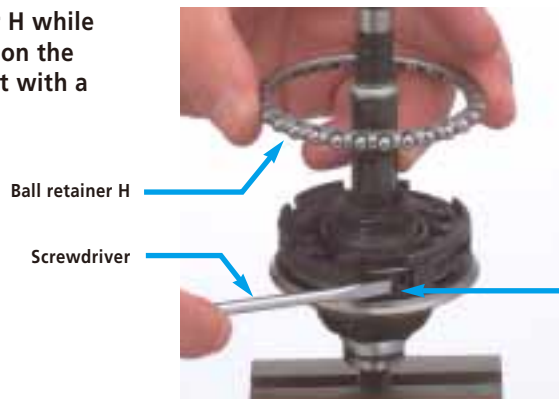
1. Hold the two bevelled surfaces of the hub axle on the sprocket side in a vice.



**Note:**

Do not damage the threads of the hub axle.

2. Install ball retainer H while pressing in pawl C on the driver and axle unit with a screwdriver.



**Note:**

Be careful of the setting direction.



Apply a liberal coating of internal hub grease.

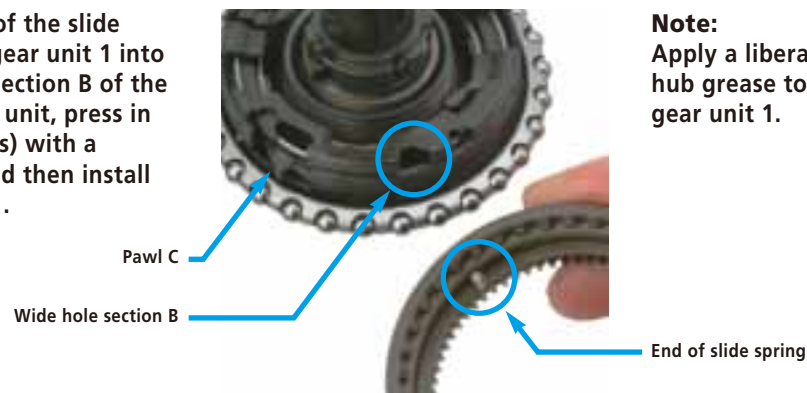
Be careful not to bend ball retainer H while pressing it.

Pawl C

Be careful not to catch on the end of return spring C.



3. Insert the end of the slide spring of ring gear unit 1 into the wide hole section B of the driver and axle unit, press in pawl C (2 places) with a screwdriver, and then install ring gear unit 1.

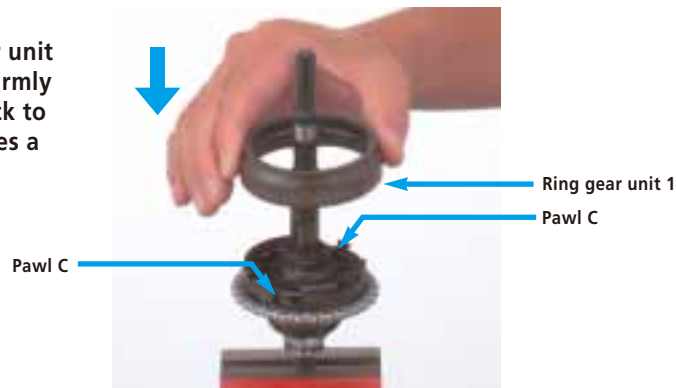


**Note:**

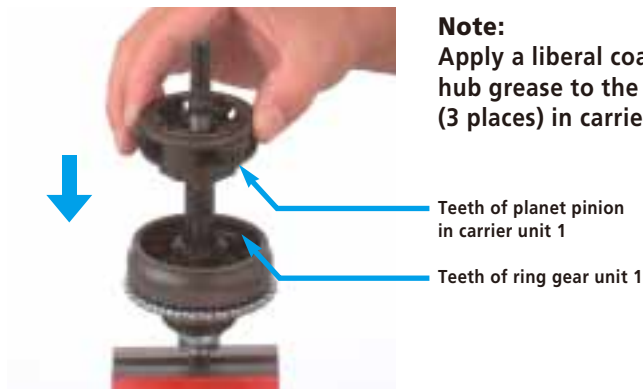
Apply a liberal coating of internal hub grease to the gear inside ring gear unit 1.

**Check:**

After installing ring gear unit 1, turn ring gear unit 1 firmly counterclockwise to check to be sure that pawl C makes a clicking sound.



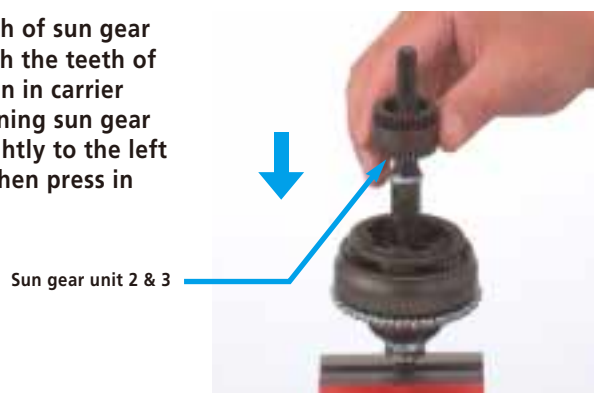
4. Engage the teeth of the planet pinion in carrier unit 1 with the teeth of ring gear unit 1, and then press in ring gear unit 1 while turning it slightly to the left and right.



**Note:**

Apply a liberal coating of internal hub grease to the planet pinions (3 places) in carrier unit 1.

5. Engage the teeth of sun gear unit 2 and 3 with the teeth of the planet pinion in carrier unit 1 while turning sun gear unit 2 and 3 slightly to the left and right, and then press in carrier unit 1.



**Note:**

Apply a liberal coating of internal hub grease to the teeth of sun gear unit 2 and 3.

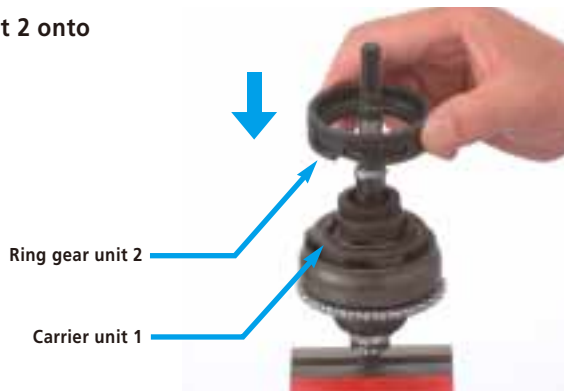
Be careful of the setting direction. If the setting is reversed, installation will not be possible.



The gear with the smooth ring section is at top.

If undue force is applied, the pawls inside will become damaged, which will cause operation problems. The gear with the smooth ring section is at top.

6. Place ring gear unit 2 onto carrier unit 1.



**Note:**

Apply a liberal coating of internal hub grease to the teeth of ring gear unit 2.

Set so that the part with the teeth is at the top.



- 7.** Engage the teeth of the planet pinion in carrier unit 2 with the teeth of ring gear unit 2 while turning carrier unit 2 slightly to the left and right, and then press in ring gear unit 2.

Teeth of planet pinion  
in carrier unit 2  
Teeth of ring gear unit 2



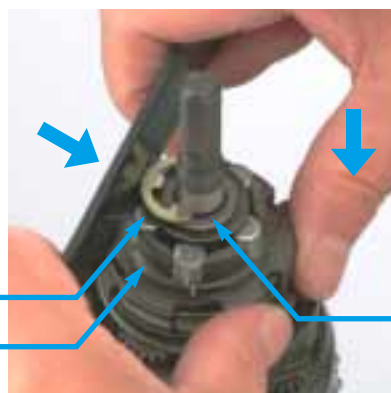
**Note:**

Apply a liberal coating of internal hub grease to the teeth of the planet pinion (3 places) in carrier unit 2.

If undue force is applied, the pawls inside will become damaged, which will cause operation problems.

- 8.** While pushing down carrier unit 2, insert the stop spring into the hub axle groove at the surface of carrier unit 2.

Stop ring  
Carrier unit 2



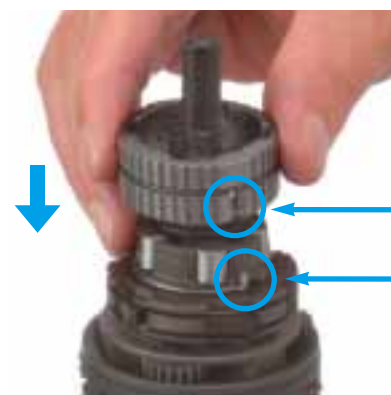
**Check:**

Check to be sure that the stop ring groove on the hub axle is visible from the edge of carrier unit 2 while carrier unit 2 is pushed down.



Hub axle groove  
should be visible

- 9.** Align the notched section of the brake shoe unit with the end of slide spring in carrier unit 2, and then install the brake shoe unit.



**Note:**

Apply a liberal coating of internal hub grease to the inside and outside of the brake shoe unit.

Notched section  
of the brake shoe unit

End of slide spring

- 10.** Install the internal assembly while turning the hub shell slightly to the right and left so that seal spring R of the hub shell is sitting in the right hand dust cap of the internal assembly.

Seal spring R  
Right hand  
dust cap  
Grease  
groove  
Hub shell  
Internal  
assembly



**Note:**

Apply a liberal coating of internal hub grease to the grease groove of the hub shell.

If seal spring R hooks into the wrong part of the right hand dust cap, push seal spring R with a screwdriver.


**Check:**

After installing the hub shell, turn the hub shell counterclockwise and check to be sure that it turns smoothly.

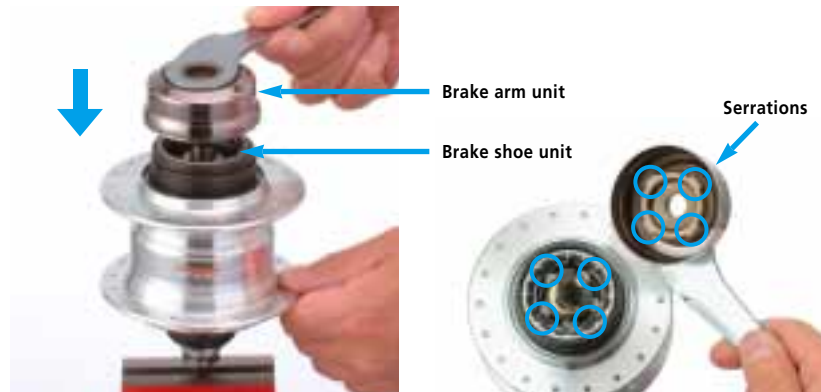


- 11.** Place ball retainer B onto the hub shell.



**Note:**  
Be careful of the setting direction.   
Apply a liberal coating of internal hub grease.

- 12.** Place the brake arm unit onto the hub axle and turn it to the left and right so that the serrations of the brake shoe and brake arm unit engage with each other. Then push the brake arm unit fully into the brake shoe unit.



- 13.** Screw the stop nut to adjust so that the hub shell can be turned smoothly without any play. After adjusting, secure the stop nut with the lock nut.



**Note:**  
Apply a liberal coating of internal hub grease to the inside and outside of the brake shoe unit.



- 14.** Install the dust cap



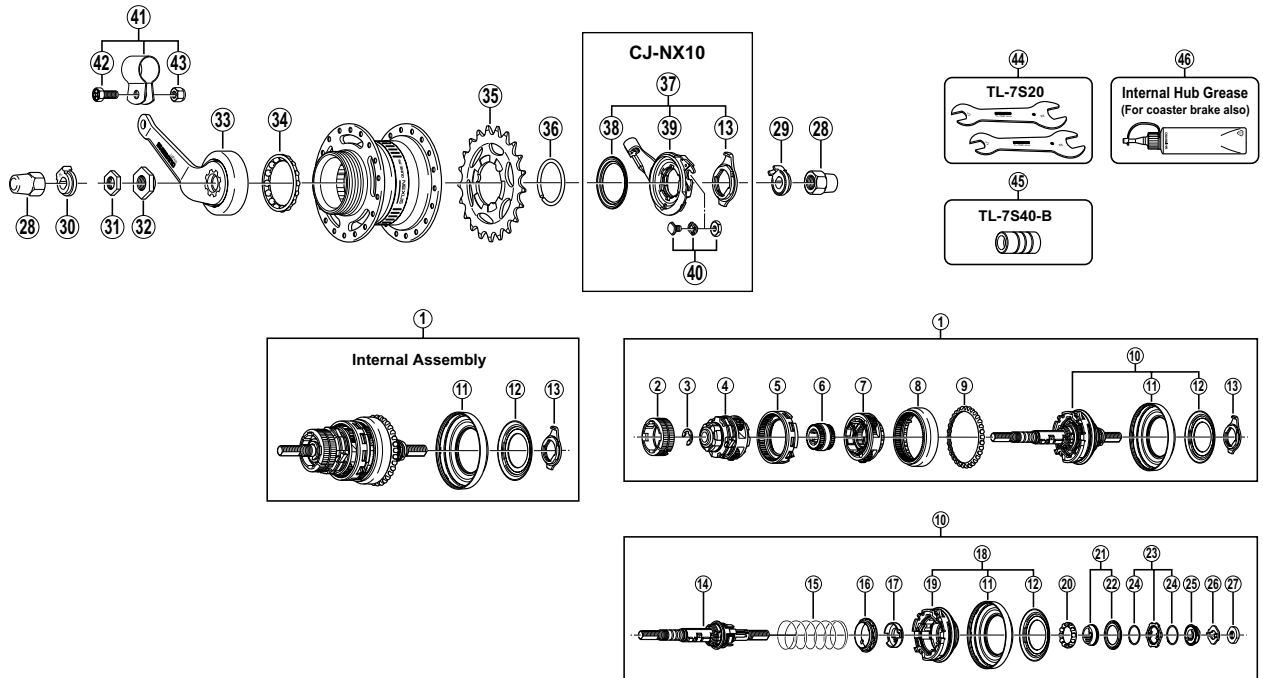
**This completes the assembly of the Inter-7 hub.**



## Spare parts list

### SHIMANO NEXUS 7-SPEED HUB w/Coaster Brake

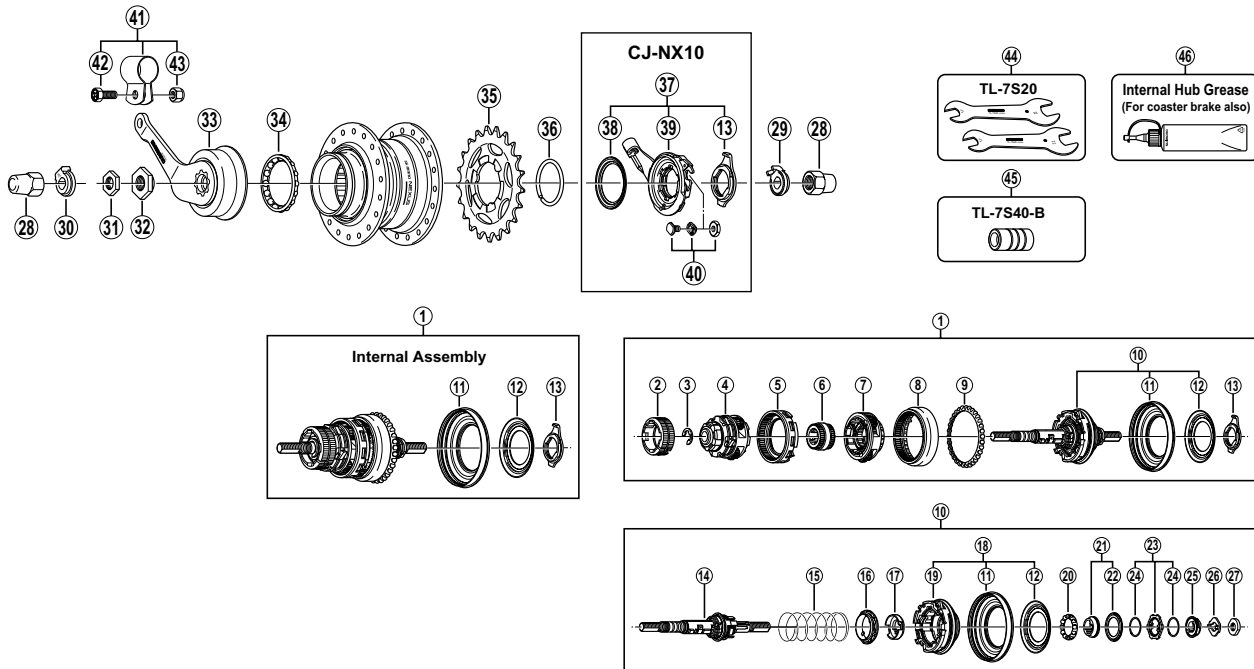
## SG-7C16 Inter-7 Hub



Q'TY	ITEM NO.	SHIMANO CODE NO.	DESCRIPTION
	1	Y-35B 98010	Internal Assembly (Axle Length 175.5 mm)
	2	Y-330 98010	Brake Shoe Unit
	3	Y-325 32000	Stop Ring (φ9 mm)
	4	Y-330 98040	Carrier Unit 2
	5	Y-330 98020	Ring Gear Unit 2
	6	Y-33F 98060	Sun Gear Unit 2 & 3
	7	Y-330 98060	Carrier Unit 1
	8	Y-330 98050	Ring Gear Unit 1
	9	Y-330 98070	Ball Retainer H (3/16" x 29)
	10	Y-35B 98020	Axle & Driver Unit (Axle Length 175.5 mm) w/Right Hand Dust Cap B & C
	11	Y-35B 05000	Right Hand Dust Cap B
	12	Y-33Z 26000	Right Hand Dust Cap C
	13	Y-33Z 98020	Cassette Joint Fixing Ring
	14	Y-34N 98030	Axle Unit (Axle Length 175.5 mm)
	15	Y-330 24000	Return Spring A
	16	Y-33Z 10000	Gear Shifting Cam
	17	Y-33Z 11000	Feed Cam
	18	Y-35B 98030	Driver Unit w/Right Hand Dust Cap B & C
	19	Y-35C 98040	Driver Unit
	20	Y-330 91600	Ball Retainer F (3/16" x 12)
	21	Y-33Z 98030	Right Hand Cone w/Seal
	22	Y-33Z 28000	Right Hand Cone Seal
	23	Y-33F 98040	Driver Plate w/Seal
	24	Y-330 12000	Driver Plate Seal
	25	Y-33E 98120	Lock Washer
	26	Y-33Z 08000	Stop Washer
	27	Y-33Z 07020	Right Hand Lock Nut (3.4 mm)
	28	Y-314 14010	Cap Nut (3/8")
	29	Y-33Z 20500	Non-turn Washer 5R (Yellow)
		Y-33M 39600	Non-turn Washer 6R (Silver)
		Y-33M 39700	Non-turn Washer 7R (Black)
		Y-33M 39510	Non-turn Washer 5L (Brown)
		Y-33M 39610	Non-turn Washer 6L (White)
		Y-33M 39710	Non-turn Washer 7L (Gray)
	31	Y-321 38040	Lock Nut (3.5 mm)
	32	Y-335 48110	Stop Nut
	33	Y-33D 90100	Brake Arm Unit
	34	Y-330 98110	Ball Retainer B (3/16" x 16)
		Y-322 03420	Sprocket Wheel 18T
		Y-322 03520	Sprocket Wheel 19T
		Y-322 03620	Sprocket Wheel 20T
	35	Y-330 60000	Sprocket Wheel 21T
		Y-330 60100	Sprocket Wheel 22T
	36	Y-321 20010	Snap Ring C
	37	Y-74Y 98050	CJ-NX10 Cassette Joint Unit
	38	Y-74Y 18000	Driver Cap
	39	Y-74Y 93100	CJ-NX10 Cassette Joint
	40	Y-74Y 98060	Inner Cable Fixing Bolt Unit for CJ-NX10
		Y-33F 98090	Brake Arm Clip Unit (5/8")
		Y-33F 98100	Brake Arm Clip Unit (3/4")
	41	Y-75M 06000	Clip Screw (M6 x 16)
	42	Y-317 27200	Clip Nut
	43	Y-130 98900	TL-7S20 Hub Spanner (17 mm x 22 mm) 2 pcs.
	44	Y-308 89000	TL-7S40-B Right Hand Cone Tool
	45	Y-041 20800	Internal Hub Grease (Net. 100g)

# SHIMANO NEXUS 7-SPEED HUB w/Coaster Brake

## SG-7C26 Inter-7 Hub



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	3	Y-325 32000	Stop Ring (Φ9 mm)
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	5	Y-330 98020	Ring Gear Unit 2
	6	Y-33F 98060	Sun Gear Unit 2 & 3
	7	Y-330 98060	Carrier Unit 1
	8	Y-330 98050	Ring Gear Unit 1
	9	Y-330 98070	Ball Retainer H (3/16" x 29)
	10	Y-35C 98020	Axle & Driver Unit (Axle Length 175.5 mm) w/Right Hand Dust Cap B & C
	11	Y-35C 07000	Right Hand Dust Cap B
	12	Y-33Z 26000	Right Hand Dust Cap C
	13	Y-33Z 98020	Cassette Joint Fixing Ring
	14	Y-34N 98030	Axle Unit (Axle Length 175.5 mm)
	15	Y-330 24000	Return Spring A
	16	Y-33Z 10000	Gear Shifting Cam
	17	Y-33Z 11000	Feed Cam
	18	Y-35C 98030	Driver Unit w/Right Hand Dust Cap B & C
	19	Y-35C 98040	Driver Unit
	20	Y-330 91600	Ball Retainer F (3/16" x 12)
	21	Y-33Z 98030	Right Hand Cone w/Seal
	22	Y-33Z 28000	Right Hand Cone Seal
	23	Y-33F 98040	Driver Plate w/Seal
	24	Y-330 12000	Driver Plate Seal
	25	Y-33E 98120	Lock Washer
	26	Y-33Z 08000	Stop Washer
	27	Y-33Z 07020	Right Hand Lock Nut (3.4 mm)
	28	Y-314 14010	Cap Nut (3/8")
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	29	Y-33M 39600	Non-turn Washer 6R (Silver)
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	30	Y-33M 39610	Non-turn Washer 6L (White)
		Y-33M 39710	Non-turn Washer 7L (Gray)
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	32	Y-335 48110	Stop Nut
	33	Y-33F 98050	Brake Arm Unit
	34	Y-330 98110	Ball Retainer B (3/16" x 16)
		Y-322 03420	Sprocket Wheel 18T
		Y-322 03520	Sprocket Wheel 19T
	35	Y-322 03620	Sprocket Wheel 20T
		Y-330 60000	Sprocket Wheel 21T
		Y-330 60100	Sprocket Wheel 22T
	36	Y-321 20010	Snap Ring C
	37	Y-74Y 98050	CJ-NX10 Cassette Joint Unit
	38	Y-74Y 18000	Driver Cap
	39	Y-74Y 93100	CJ-NX10 Cassette Joint
	40	Y-74Y 98060	Inner Cable Fixing Bolt Unit for CJ-NX10
		Y-33F 98090	Brake Arm Clip Unit (5/8")
	41	Y-33F 98100	Brake Arm Clip Unit (3/4")
	42	Y-75M 06000	Clip Screw (M6 x 16)
	43	Y-317 27200	Clip Nut
	44	Y-130 98900	TL-7S20 Hub Spanner (17 mm x 22 mm) 2 pcs.
	45	Y-308 89000	TL-7S40-B Right Hand Cone Tool
	46	Y-041 20800	Internal Hub Grease (Net. 100g)



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